Canadian equity derivatives

Quarterly Newsletter

January 2018



General information



Patrick Ceresna

Patrick Ceresna is the founder and Chief Derivative Market Strategist at Big Picture Trading. Patrick is a Chartered Market Technician, Derivative Market Specialist and Canadian Investment Manager by designation. In addition to his roll at Big Picture Trading, Patrick is an instructor on derivatives for the TMX Montreal Exchange, educating investors and investment professionals across Canada about the many valuable uses of options in their investment portfolios. Patrick is also co-host to the MacroVoices weekly podcasts. Patrick specializes in analyzing the global macro market conditions and translating them into actionable investment and trading opportunities. With his specialization in technical

analysis, he bridges important macro themes with the attempt to understand when those trends are beginning and understanding where they likely to go. With his expertise in options trading, he seeks to create opportunities that leverage returns, while managing/defining risk and or generating consistent enhanced income. Patrick has designed and teaches Big Picture Trading's Technical, Options and Macro Masters Programs while providing the content for the members in regards to daily live market analytic webinars, alert services and model portfolios.

2018 Trading Calendar

JANUARY			FEBRUARY				MARCH					
S	М	Т	WTFS	S	М	Т	WTFS	S	М	Т	WTFS	
	1	2	3 4 5 6				1 2 3				1 2 3	
			10 11 12 13				7 8 9 10	4	5	6	7 8 9 10	
14	15	16	17 18 19 20	11	12	13	14 15 16 17	11	12	13	14 15 16 17	
			24 25 26 27		19		21 22 23 24	18	19	20	21 22 23 24	
28	29	30	31	25	26	27	28	25	26	27	28 29 30 31	

- --- Listing
- ----- Last trading day
- Expiration
- Equity & ETFs options
- Weekly options
- S&P/TSX 60 Index Options (SX0)
- Options on the US Dollar (USX)

For more information, please contact:

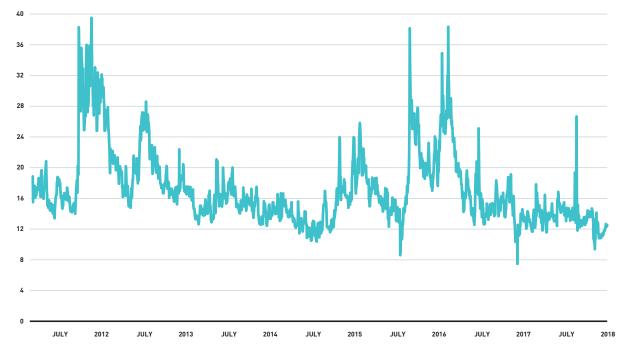
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Opportunities from a Low-Volatility Market Environment

S&P / TSX 60 VIX



Late Business Cycle Bull Market

One of my underlying tenets towards the market anchors on the adage that to forecast the future, you must start by understanding the present. So where are we presently? From a business cycle perspective, the Canadian and global economies are now 8 years past the last major recessions back in 2008-09. On a comparison basis this global expansion has been one of the longest in the post WW2 period, largely fueled by unprecedented central bank liquidity.

So what would suggest that we are in the late stages of the current business cycle? In Canada, to me this starts with the Bank of Canada. Central bank monetary tightening is a hallmark sign of the economy being in the late stages. That tightening is often justified with the economy reaching structurally low unemployment, peak growth and growing inflation fears.

Another hallmark of late stage cycles is a euphoric bull market rise where valuations become secondary and momentum drives the positive feedback loop taking stocks higher. Arguably the bullishness is most evident south of the boarder fueled by Trump's tax cuts and infrastructure spending, but when looking at sectors like the Canadian banks, there is little argument that they are lofty in both price and valuation.

So what is the probability that we see an economic recession or bear market in 2018? It is likely too early to be anticipating a turn in the 1st half of 2018. But it doesn't mean that the markets won't offer some volatility as investor sentiment is extreme enough for a mean reverting, liquidity driven, market correction to emerge. Particularly in light of the low volatility environment we are in.

Bank of Canada Highlights the Low-Volatility Market Environment

Back in our October 2017 quarterly newsletter, I highlighted a number of precipitating drivers behind the low volatility regime. This time it was Bank of Canada's turn in its November 2017 Financial System Review. When looking at the "Assessment of Vulnerabilities and Risks", they discuss the driving strategies in the low-volatility market environment. In the report they propose that there is a chance that the pricing of risk may be in line with fundamentals, but there is equally a chance it is not. If it is not, it could be leading to investors taking excessive exposure to risky assets by using financial leverage. They go on to highlight the growing popularity of the short VIX trade "suggesting that investor expectations of a persistent low-volatility environment have become more entrenched."

This arguably is growing big enough to impact markets if a catalyst drove volatility back to its historical norms. Through volatility targeting strategies and direct short volatility products, it is suggested that there is as much as \$2 trillion of exposure. In that report, the BoC particularly highlights the risk-parity strategy. Those not familiar with the vol targeting funds, they often, on a leveraged basis, seek to rebalance the portfolio asset allocation based upon targeting a specific level of risk. Today's low volatility environment has essentially allowed this managed money to leverage up. Arguably the question many quantitative analysts have openly asked – will there be sufficient liquidity in the market when all of these funds are forced to sell to rebalance the risk? This remains one of the most prominent known threats to the well-established bull market.

Option Strategies to Profit During Late Stage Bull Markets

When put into perspective, the current market may represent one of the most significant mispricing's of volatility that I have seen in my career. With almost all global asset classes trading near historically high valuations, volatility has never been cheaper. In Canada, the VIXC, our measure of implied volatility on the options for the TSX 60 Index is hovering at the 12.00 handle. Beyond a few very brief spikes below 10, this is the lowest sustained level in the post financial crisis era.

Taking this into consideration, one of the ideal strategies is to remain, long and strong growth and high beta stocks while spending some money on protective hedges.

Hedging with Puts in this Low Vol Environment

Using the example of an investor that is holding a core Royal Bank position. At the time of writing (January 22, 2018) the 30-day February 16th expiration ATM option is trading at a 9.6% implied volatility. It has been very common for Royal Bank options to trade in the 10-15% range. While the cheapness of an option does not imply the probability that you will need to use it, it does imply that there are very few times that one could insure the downside risk on the stock at these prices. Yet, human nature is a peculiar thing. The easy profits feed the bulls and when everyone is complacent and content, the motivation to spend paper profits to secure risk, seems to be the last thing on ones mind.

Call options as an Alternative to Stock Ownership

Another way to remove tail risk in this low volatility environment is to gain new market exposure with high delta call options over stock ownership. As an example, an advisor is managing a clients \$1,000,000 investment portfolio. The client has run into an inheritance and deposits \$300,000.00 more into the investment account. A common protocol would be systematically to allocate the cash in accordance to the clients KYC and buy the advisors model portfolio recommendations. What if alternatively, the advisor was to give the client exposure with a high delta in-the-money call option. Let us assume for this example the advisor needs to allocate \$200,000 or 66% of the capital to equity.

Using XIU options to gain the exposure.

- iShares S&P/TSX60 Index (TSX:XIU) is trading at \$24.25 (January 22, 2018)
- The June 2018 \$22.00 call option is trading at \$2.35
 - This is comprised of \$2.25 of intrinsic value and \$0.10 of time value

- This has a 0.88 delta
- One would need 8,200 shares of exposure or 82 call options
- 82 call options would involve a \$19,270 outlay (82 x 100 x \$2.35)
- The remaining cash remains in a money market instrument.

Why would an advisor consider this? They get their client long market exposure with full upside participation but at the same time remove the risk a surprise left-tail event. A trade off where if the market proceeds to rise 20%, the client would have participated on the majority, while if the market proceed to correct 20% lower, the client's losses would be limited to 10%. Introducing that kind of asymmetry to the clients account will give the advisor optionality if the late stage business cycle was to turn.

The options playbook

Cash Covered Puts on Barrick Gold (TSX:ABX)

Barrick Gold (TSX:ABX)



The tides appear to be turning for gold bullion as the predominant weakness in the US dollar now seems to be acting as a tail wind. This has translated into more price stability in many of the gold miners which are, as a whole, trading well off their 2015 levels. Within the gold miners, Barrick Gold has been a relative underperformer largely driven by lingering concerns about their Tanzania mining operation. While there are overlying concerns, there is no denying that Barrick is still the largest gold producer in the world and well diversified in its operations. If gold continues to ascend, the miner should stay buoyant with the rising tide.

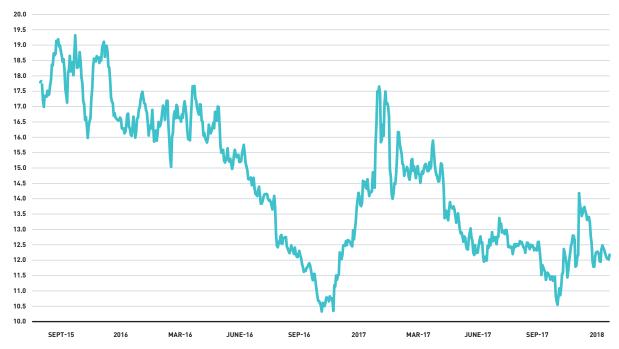
Here is the breakdown:

- Barrick Gold (TSX:ABX) is trading at \$18.54 (January 24, 2018)
- Goldcorp has a 52wk range of \$17.07-\$27.19
- The July 20, 2018 \$19.00 put is bidding \$1.70
- Every put sold represents an obligation to potentially have to buy 100 shares or \$1,900.00 (\$19.00 x 100) of stock by the expiration

The \$1.70 premium represents an 8.94% income in just 177 days for undertaking the obligation.

- If the stock remains below \$19.00 come the expiration, the investor will be assigned the shares with an adjusted cost base (break-even) of \$17.30 (\$19.00-\$1.70) which, if assigned, is relatively close to its 52-week low of \$17.07.
- If the stock remains range bound or bullish, the investor generated a respectable income return on a blue-chip gold mining stock.

Breakout on Cameco (TSX:CCO)



Cameco (TSX:CCO)

Have the tides turned in the multi-year bear market on uranium and uranium stocks? A number of green shoots emerging, but none greater than the sector shifting news from Cameco when it shut down the world's largest uranium mine for 10 months. A move to help bring to end the oversupply in the global market. Their McArthur River mine represents 11% of the world's annual production. One can argue that this was addition through subtraction. After the announcement, both the prices of uranium and the Cameco stock have risen. While a bear market bottom is commonly a process, not an event, if we have seen the lows, positioning for a potential bullish breakout may be worth the risk.

Here is the breakdown:

- Cameco (TSX:CCO) is trading at \$11.92 (January 24, 2018)
- CCO has a 52wk range of \$9.90-\$17.49
- The January 18th, 2019 \$10.00 call is asking \$2.70

In this case, rather than outlaying the cost to buy the shares outright, the long-term call options can be bought for \$2.70. Note that there is \$1.92 of intrinsic value in the options. The remaining \$0.78 represents just over a 6.50% cost for just under 12 months of time. While on the surface it appears a steep cost, one simply needs to be reminded of the volatility this stock is capable of as it is not out of the realm of possibility that the stock trades back towards the \$20.00 level, where Cameco spent much of the last decade.

Market Statistics

Q4 2017

Top 10 Most Active Option Classes

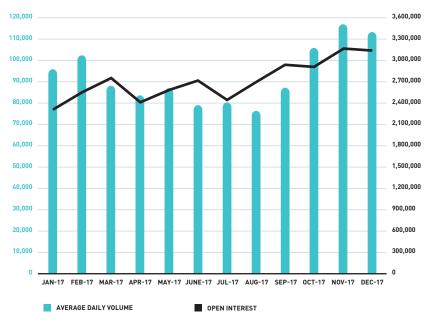
COMPANIES	SYMBOL	VOLUME	INSTITUTIONAL	RETAIL	INSTITUTIONAL %	RETAIL %
1 iShares S&P/TSX 60 Index ETF	XIU	1,092,125	947,797	144,328	87%	13%
2 Enbridge Inc.	ENB	457,397	352,010	105,387	77%	23%
3 Canopy Growth Corporation	WEED	389,480	30,348	359,132	8%	92%
4 Canadian Imperial Bank of Commerce	СМ	281,178	117,386	163,792	42%	58%
5 BMO Equal Weight Banks Index ETF	ZEB	271,863	269,589	2,274	99 %	1%
6 iShares S&P/TSX Capped Energy Index ETF	XEG	229,830	200,629	29,201	87%	13%
7 Royal Bank of Canada	RY	222,603	62,338	160,265	28%	72%
8 Toronto-Dominion Bank (The)	TD	209,570	67,201	142,369	32%	68%
9 BM0 S&P 500 Index ETF	ZSP	185,593	184,975	618	100%	0%
10 Bank of Montreal	BMO	181,708	49,001	132,707	27%	73%

Most Crossed Option Classes

COMPANIES	SYMBOL	VOLUME			
1 iShares S&P/TSX 60 Index ETF	XIU	947,797	11 Toronto-Dominion Bank (The)	TD	67,2
2 Enbridge Inc.	ENB	352,010	12 Alimentation Couche Tard Inc., Cl. B	ATD	66,9
3 BMO Equal Weight Banks Index ETF	ZEB	269,589	13 Royal Bank of Canada	RY	62,3
4 iShares S&P/TSX Capped Energy Index ETF	XEG	200,629	14 iShares S&P/TSX Global Gold Index ETF	XGD	56,4
5 BMO S&P 500 Index ETF	ZSP	184,975	15 National Bank of Canada	NA	51,8
6 iShares S&P/TSX Capped Financials Index ETF	XFN	135,768	16 Bank of Montreal	BMO	49,0
7 Canadian Imperial Bank of Commerce	СМ	117,386	17 Aurora Cannabis Inc.	ACB	48,0
8 Lundin Mining Corp.	LUN	76,832	18 Teck Resources Limited, Cl. B	TECK	45,6
9 Manulife Financial Corporation	MFC	71,802	19 Bank of Nova Scotia (The)	BNS	43,9
0 Cenovus Energy Inc.	CVE	69,844	20 ARC Resources Ltd.	ARX	42,6
••					

Options Trading Volume by Sector

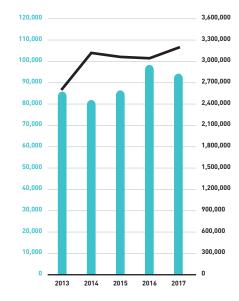
SECTEUR	Percentage		Percentage
Energy	29.48%	Consumer Staples	3.37%
Financials	23.42%	Utilities	2.44%
Materials	16.51%	Telecommunication Services	2.17%
Health Care	7.78%	Information Technology	1.78%
Industrials	6.22%	Real Estate	0.90%
Consumer Discretionary	5.95%		



Equity Average Daily Volume and Open Interest

Over a 12 month period (2017)

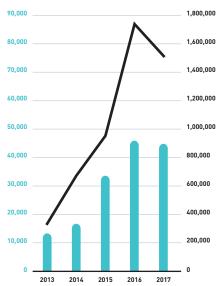
Over a 5 year period



ETF Average Daily Volume and Open Interest







Trading Tools

→ Covered Call Calculator

→ Options Calculator

→ TMX Trading Simulator

Useful Links

GUIDES → Equity derivatives	MX INDICES → S&P/TSX 60 VIX Index (VIXC)	OTHERS → Options List		
 → Index derivatives → Currency derivatives → Equity options tax regime 	 → MX Covered Straddle Writers' Index (MPCX) → MX Covered Call Writers' Index (MCWX) 	→ Put/Call Ratios		
🗂 m-x.tv	OptionMatters.ca	m-x.ca/twitter		
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